

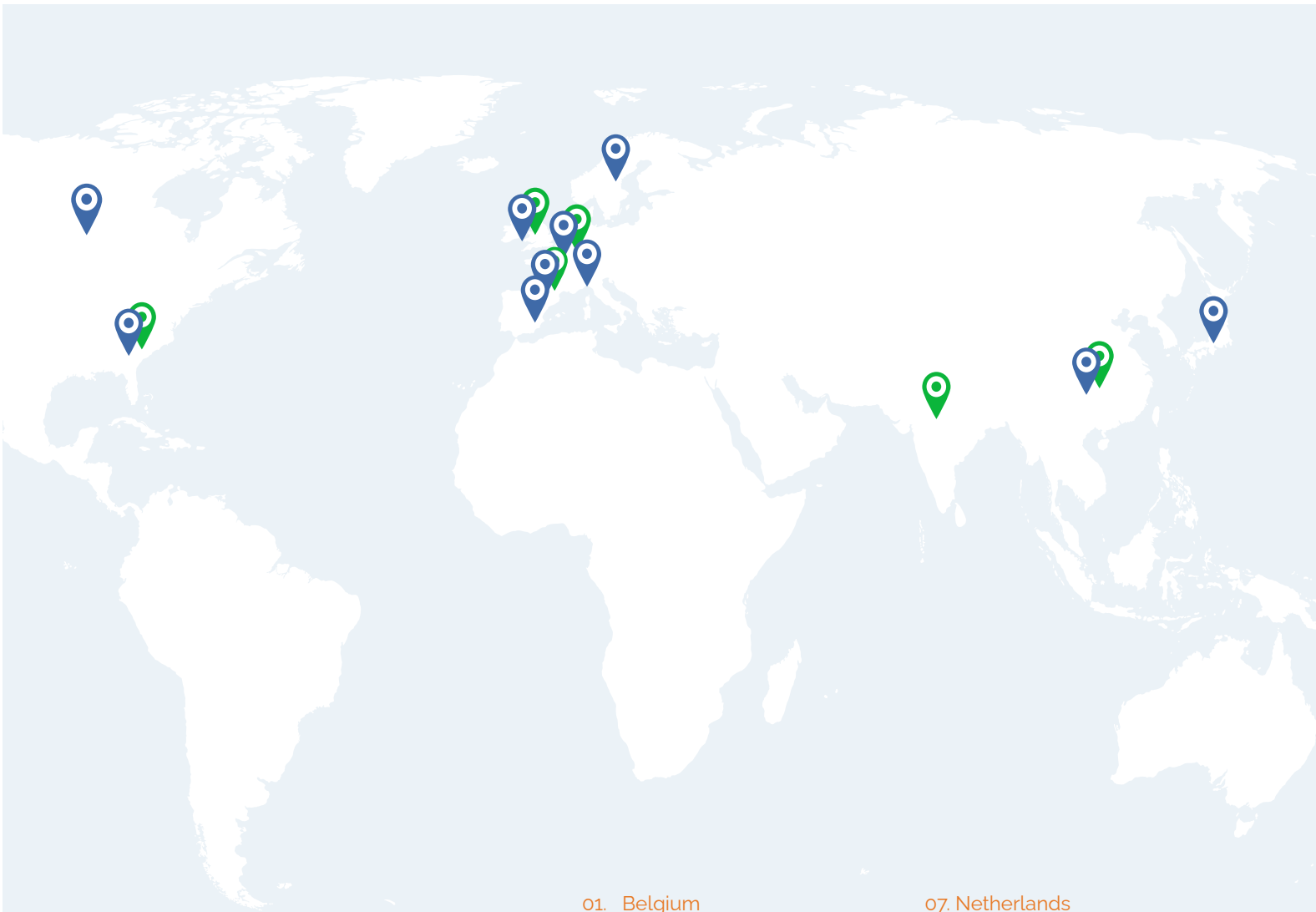
The image features a large orange diagonal shape on the left side. The background is a light blue gradient with a glowing, interconnected network of white lines and dots, resembling a globe or a complex data network. The text is white and positioned on the orange background.

open
invention
network[®]

2023 Year-End Review

It's been another successful
year for Open Source &
Patent Non-Aggression.

Here's a look at Open Invention Network in 2023.



On the Road Again 12 countries visited

OIN has returned to travelling after the worldwide impact of Covid.



Our CEO, Keith Bergelt, delivered 20 presentations at multiple conferences & met with key Open Source stakeholders around the world.



OIN representatives have also been active in multiple countries.

01. Belgium
Keith Bergelt, CEO

02. Canada
Keith Bergelt, CEO

03. China
Keith Bergelt, CEO / OIN Representatives

04. France
Keith Bergelt, CEO / OIN Representatives

05. India
OIN Representatives

06. Japan
Keith Bergelt, CEO

07. Netherlands
Keith Bergelt, CEO / OIN Representatives

08. Spain
Keith Bergelt, CEO

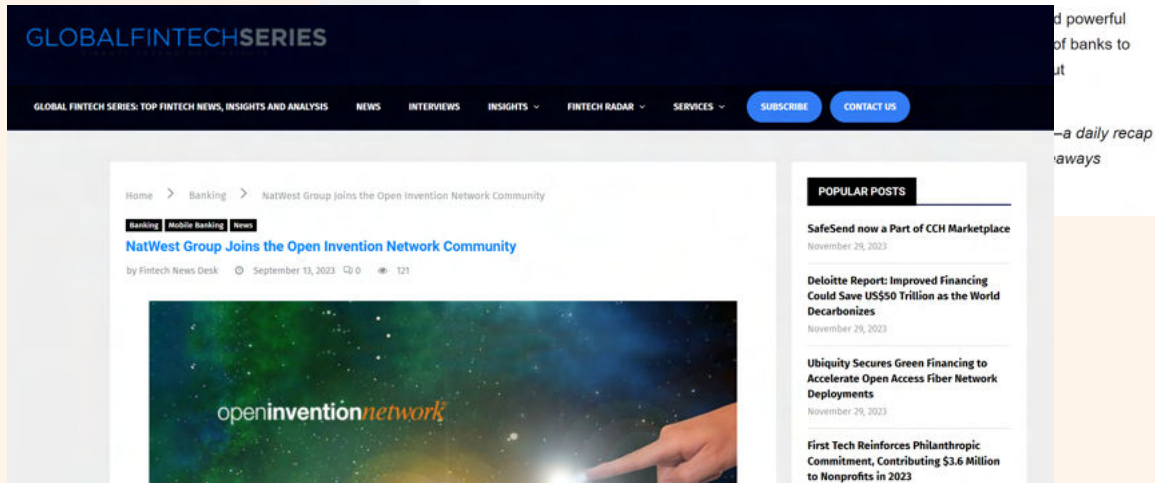
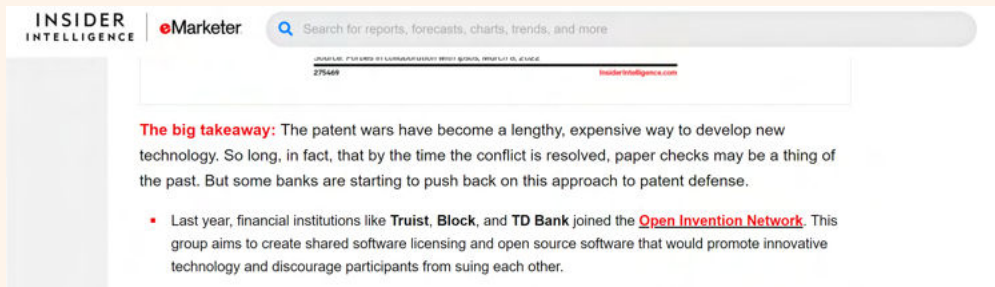
09. Sweden
Keith Bergelt, CEO

10. Switzerland
Keith Bergelt, CEO

11. United Kingdom
Keith Bergelt, CEO / OIN Representatives

12. United States
Keith Bergelt, CEO / OIN Representatives

International Headlines



OIN captured attention from **11 different media outlets**, including garnering 1st-time headlines from such publications as:

- + *Dealmakers*
- + *Global FinTech Series*
- + *Insider Intelligence*
- + *Semiconductor Digest*



OIN Global Member Growth

OIN members represent **20 industries & all 11 business sectors** based on the Global Industry Classification Standard.

Here are a few companies that joined our community in 2023



United States



United Kingdom



Sweden



United States



United States



United States



Japan



United Kingdom



Japan



Japan



United Kingdom



France



United States



United States



Japan



Japan



United States



United States



France




Japan



Japan

OIN 2023 Growth Overview

Approaching
4,000
worldwide
members



94 new
Community
Members

16 individual
Developers &
Inventors

>150 Countries & Regions



4 of the **Top 7 patent filers in China** are OIN community members —

Haier



HUAWEI

oppo

Tencent 腾讯



24 Greater China OIN Members with **>176K** Worldwide Patents.

Our community members own approximately **3 million patents & applications** in aggregate

The world's **Top 6 holders of patents & patent applications in Generative AI technologies** are OIN community members:

amazon

Google

IBM

Microsoft

Meta

salesforce

Open Source Trends

1. Organizations are creating **Open Source Program Offices** helping define strategies to encourage use and collaboration.
2. Open Source tools are allowing countries throughout the world to move the needle on **government mandates for clean energy**.
3. **Open Source Large Language Models** are increasing in popularity & will continue to do so as new companies from around the world launch applications.
4. Open Source is shaking up the hardware industry. **Open Hardware, including RISC-V-based chips** for example, is turning up in everything —from laptops to autonomous car systems.
5. The emerging **Open Hardware market continues experiencing rapid growth** with an estimated CAGR of 20% between 2021-2026.
6. 2023 saw the **largest number of 1st-time developers** contributing to such Open Source projects as freeCodeCamp, First Contributions & GitHub Education.
7. **AI Open Source adoption** continues its rapid growth & is now mainstream. A GitHub survey shows 92% of developers use AI-powered coding assistants, but AI is also enhancing tasks requiring learning, problem-solving & decision-making.
8. 6.92 billion people in the world —86.41% of the population — **own a smartphone** & the market keeps growing.
9. **India's smartphone market** is projected to reach 175 million units in 2023 — a 10% growth over 2022.
10. By 2025, the number of lines of code – many of which are Open Source — in the average luxury car **will be 200 million!**

Open Source markets continue unprecedented growth:










The Open Source eCommerce Platform market size is estimated to **increase by \$4.53 billion (USD)** from 2023 to 2028.

The Open Source Services market is expected to **climb from \$25.6 billion (USD) in 2022 to \$54.1 billion in 2027** with APAC as the fastest growing region.

Nearly **25% of hardware designs** already incorporate RISC-V. The RISC-V CPU core market is expected to **grow at a 114.9% CAGR**, capturing >14% of all CPU cores by 2025.

Open Source technologies are touching new industries.

Here are a few that we highlighted throughout the year —

- | | |
|---|---|
|  Agriculture |  Nuclear Physics |
|  Education |  Pharmaceuticals |
|  Entertainment |  Space |
|  Media |  Zoology |
|  Neurotechnology | |

Noteworthy News

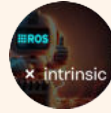


Following the SolarWinds supply chain global attack in 2020 & the Log4j vulnerability in 2021, debates continue taking place about whether governments should intervene in or regulate software security policies.

In February, WSOU Investments — also known as Brazos Licensing and Development and a Patent Assertion Entity (PAE) which has historically been active with litigation — intentionally chose the U.S. Western District of Texas Court when it sued Dell, EMC, and VMware because it tends to be pro-patent, ruling in favor of plaintiffs. Judge Albright tossed out the case. This is significant because the Waco Division Federal Court keeps the busiest patent docket in the U.S. and Judge Albright has presided over 19% of all U.S. patent cases since 2021.



Unified Patents Open Source Zone challenged 54 Patents so far, with an excellent success rate. OIN, Microsoft, and the Linux Foundation fund the Zone.



In an unexpected move, Intrinsic — a company within Google — acquires Open Source Robotics Corporation. Google is a funding member of OIN.



Patcepta is a new Open Source rules engine for improving patent prosecution and management through automation. It's the 1st legal industry codebase and is sponsored by Unified Patents and the Linux Foundation.



Apache Cassandra 4.1 database produced its 1st major update in 18 months, improving transaction performance and scalability. Cassandra is one of many Apache packages covered by OIN's Linux System which defines the scope of the patent cross-license between OIN community members.

In April, the United States Patent & Trademark Office requested public input on proposed Patent Trial & Appeal Board changes. More than 95% of all public comments — and nearly 85% of unique comments — opposed the proposals. OIN community members and the greater Open Source community were key contributors of these comments. The proposed changes, if greenlit, would have defied the intent of the America Invents Act, wreaked havoc on the global economy and fueled a surge in Patent Assertion Entity litigation.



The Open Source Community Africa is working with OIN community members Google, Microsoft and Meta.